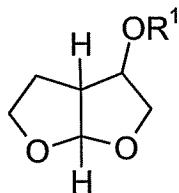


**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

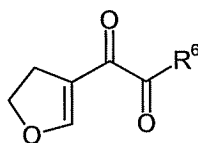
1. (currently amended) A process for the preparation of compounds of formula (I)



(I)

diastereoisomers, enantiomers, and mixtures thereof,  
wherein R¹ is hydrogen, comprising:

- a) treating a compound of formula (XII)



(XII)

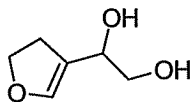
wherein:

R⁶ is halogen, -OR⁷, or -NR⁸R⁹;

R⁷ is hydrogen, C₁-₆alkyl, C₃-₈cycloalkyl, C₆-₁₄aryl, or C₆-₁₄arylC₁-₆alkyl;

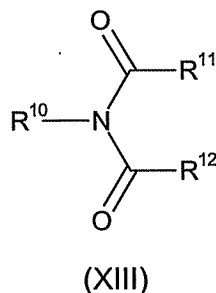
R⁸ and R⁹ are independently selected from hydrogen, C₁-₆alkyl, C₃-₈cycloalkyl, C₆-₁₄aryl, and C₆-₁₄arylC₁-₆alkyl;

with a first reducing agent to form an alcohol of formula (III)



(III)

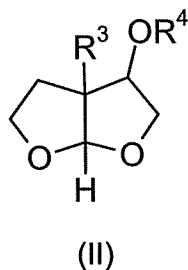
- b) treating the alcohol of formula (III) with bromine, iodine, iodine monochloride, an N-fluoro bis sulfonamide or a compound of formula (XIII)



wherein:

R<sup>10</sup> is chlorine, bromine, or iodine; and

R<sup>11</sup> and R<sup>12</sup> are independently selected from C<sub>1-6</sub>alkyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-14</sub>aryl, and C<sub>6-14</sub>arylC<sub>1-6</sub>alkyl, or R<sup>11</sup> and R<sup>12</sup> together with the atoms to which they are attached form a 5-8 5-membered ring; to form a compound of formula (II)

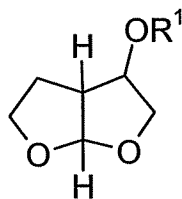


wherein R<sup>3</sup> is halogen, and R<sup>4</sup> is hydrogen; and

c) treating a compound of formula (II) with a second reducing agent to afford a compound of formula (I), wherein R<sup>1</sup> is hydrogen.

2. (originally presented) A process for the preparation of compounds of formula (I) according to claim 1, wherein said first reducing agent is selected from the group consisting of di-*isobutyl*aluminum hydride (DIBAL), sodium borohydride, and lithium aluminum hydride, R<sup>6</sup> in the compound of formula (XII) is -OR<sup>7</sup> wherein R<sup>7</sup> is C<sub>1-6</sub>alkyl, the compound of formula (XIII) is N-bromosuccinimide, and the second reducing agent is palladium on carbon in combination with hydrogen.

3. (currently amended) A process for the preparation of compounds of formula (I)

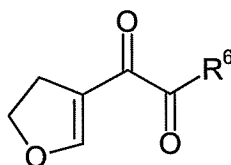


(I)

diastereoisomers, enantiomers, and mixtures thereof,

wherein R¹ is -C(O)R²; and R² is C<sub>1-6</sub>alkyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-14</sub>aryl, or C<sub>6-14</sub>arylC<sub>1-6</sub>alkyl, comprising:

a) treating a compound of formula (XII)



(XII)

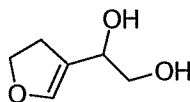
wherein:

R⁶ is halogen, -OR⁷, or -NR⁸R⁹;

R⁷ is hydrogen, C<sub>1-6</sub>alkyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-14</sub>aryl, or C<sub>6-14</sub>arylC<sub>1-6</sub>alkyl; and

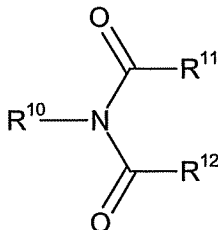
R⁸ and R⁹ are independently selected from hydrogen, C<sub>1-6</sub>alkyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-14</sub>aryl, and C<sub>6-14</sub>arylC<sub>1-6</sub>alkyl;

with a first reducing agent to form an alcohol of formula (III)



(III)

b) treating the alcohol of formula (III) with bromine, iodine, iodine monochloride, an N-fluoro bis sulfonamide or a compound of formula (XIII)

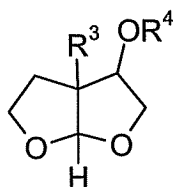


(XIII)

wherein:

R¹⁰ is chlorine, bromine, or iodine; and

$R^{11}$  and  $R^{12}$  are ~~independently selected from  $C_{1-6}$ alkyl,  $C_{3-8}$ cycloalkyl,  $C_{6-14}$ aryl, and  $C_{6-14}$ aryl $C_{1-6}$ alkyl,~~ or  $R^{11}$  and  $R^{12}$  together with the atoms to which they are attached form a ~~5-8~~ 5-membered ring;  
to form a compound of formula (II)



(II)

wherein  $R^3$  is halogen, and  $R^4$  is hydrogen;

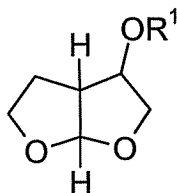
c) treating a compound of formula (II) with a second reducing agent to afford a compound of formula (I), wherein  $R^1$  is hydrogen; and

~~d) resolving to form a compound of formula (I), wherein  $R^1$  is  $-C(O)R^2$  and  $R^2$  is  $C_{1-6}$ alkyl,  $C_{3-8}$ cycloalkyl,  $C_{6-14}$ aryl, or  $C_{6-14}$ aryl $C_{1-6}$ alkyl.~~

d) reacting a compound of formula (I) wherein  $R^1$  is hydrogen with an esterifying agent in an aprotic solvent in the presence of a base to form a compound of formula (I) wherein  $R^1$  is  $-C(O)R^2$ ; and  $R^2$  is  $C_{1-6}$ alkyl.

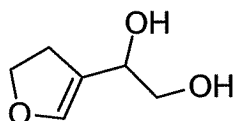
4. (cancelled)

5. (originally presented) A process for the preparation of compounds of formula (I)



wherein  $R^1$  is hydrogen,

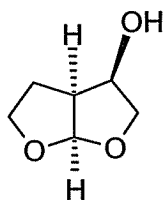
comprising treating a compound of formula (III)



(III)

with an acid selected from the group consisting of hydrochloric acid, hydrobromic acid, hydroiodic acid, acetic acid, sulfuric acid, and sulfonic acid.

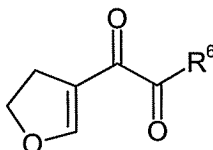
6. (currently amended) A process for the preparation of a compound of formula (V)



(V)

~~substantially free from other diastereoisomers~~, comprising:

a) treating a compound of formula (XII)



(XII)

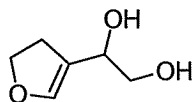
wherein:

$R^6$  is halogen,  $-OR^7$ , or  $-NR^8R^9$ ;

$R^7$  is hydrogen,  $C_{1-6}$ alkyl,  $C_{3-8}$ cycloalkyl,  $C_{6-14}$ aryl, or  $C_{6-14}$ aryl $C_{1-6}$ alkyl; and

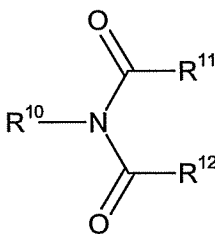
$R^8$  and  $R^9$  are independently selected from hydrogen,  $C_{1-6}$ alkyl,  $C_{3-8}$ cycloalkyl,  $C_{6-14}$ aryl, and  $C_{6-14}$ aryl $C_{1-6}$ alkyl;

with a first reducing agent to form an alcohol of formula (III)



(III)

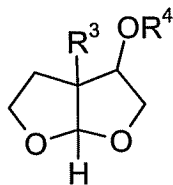
b) treating the alcohol of formula (III) with bromine, iodine, iodine monochloride, an N-fluoro bis sulfonamide or a compound of formula (XIII)



(XIII)

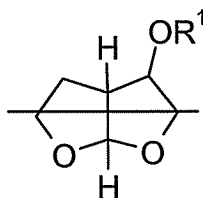
wherein:

$R^{10}$  is chlorine, bromine, or iodine; and  
 $R^{11}$  and  $R^{12}$  are ~~independently selected from  $C_{1-6}$ alkyl,  $C_{3-8}$ cycloalkyl,  $C_{6-14}$ aryl, and  $C_{6-14}$ aryl $C_{1-6}$ alkyl,~~ or  $R^{11}$  and  $R^{12}$  together with the atoms to which they are attached form a 5-8 5-membered ring;  
to form a compound of formula (II)



(II)

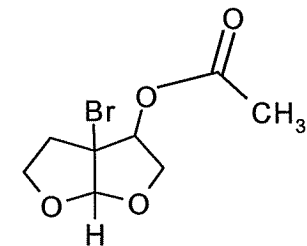
wherein  $R^3$  is halogen and  $R^4$  is hydrogen;  
~~e) treating a compound of formula (II) with a second reducing agent to afford a compound of formula (I)~~



(I)

wherein  $R^1$  is hydrogen; and

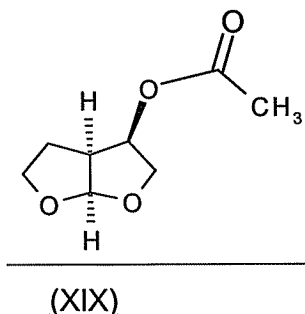
c) reacting a compound of formula (II) with an acylating agent to form a compound of formula (XVI);



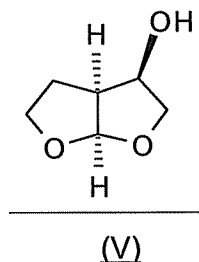
(XVI)

~~d) resolving to form a compound of formula (I), wherein  $R^1$  is hydrogen or  $C(O)R^2$  and  $R^2$  is  $C_{1-6}$ alkyl,  $C_{3-8}$ cycloalkyl,  $C_{6-14}$ aryl, or  $C_{6-14}$ aryl $C_{1-6}$ alkyl.~~

d) resolving a compound of formula (XIV) to form a compound of formula (XIX);

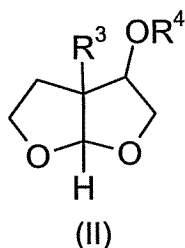


e) reducing and deprotecting a compound of formula (XIX) to form a compound of formula (V)



containing from about 0 to 10% of other enantiomers and diastereoisomers.

7. (originally presented) A compound of formula (II)



wherein:

R<sup>3</sup> is halogen;

R<sup>4</sup> is hydrogen or -C(O)R<sup>5</sup>;

R<sup>5</sup> is hydrogen, C<sub>1-6</sub>alkyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-14</sub>aryl, or C<sub>6-14</sub>arylC<sub>1-6</sub>alkyl; and  
diastereoisomers, enantiomers, and mixtures thereof.

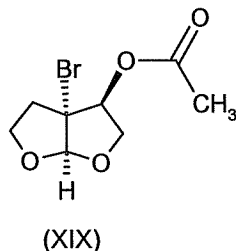
8. (originally presented) A compound of formula (II) according to claim 7  
wherein R<sup>3</sup> is bromine and R<sup>4</sup> is hydrogen.

9. (originally presented) A compound of formula (II) according to claim 7  
wherein R<sup>3</sup> is bromine, R<sup>4</sup> is -C(O)R<sup>5</sup> and R<sup>5</sup> is C<sub>1-6</sub>alkyl.

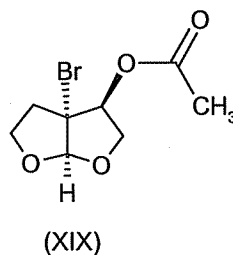
10. (originally presented) A compound of formula (II) according to claim 7 wherein  $R^3$  is bromine,  $R^4$  is  $-C(O)R^5$ , and  $R^5$  is  $-CH_3$ .

11. (cancelled)

12. (originally presented) A compound of formula (XIX)

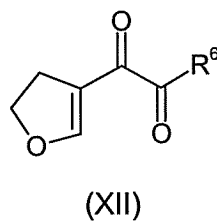


13. (currently amended) A process for the preparation of a compound of formula (XIX)



comprising:

a) treating a compound of formula (XII)



wherein:

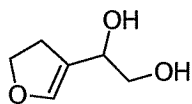
$R^6$  is halogen,  $-OR^7$ , or  $-NR^8R^9$ ;

$R^7$  is hydrogen,  $C_{1-6}$ alkyl,  $C_{3-8}$ cycloalkyl,  $C_{6-14}$ aryl, or  $C_{6-14}$ aryl $C_{1-6}$ alkyl; and

$R^8$  and  $R^9$  are independently selected from hydrogen,  $C_{1-6}$ alkyl,  $C_{3-8}$ cycloalkyl,  $C_{6-14}$ aryl, and  $C_{6-14}$ aryl $C_{1-6}$ alkyl;

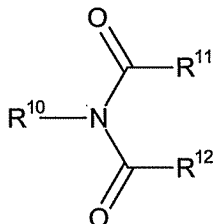
with a reducing agent to form an alcohol of formula (III)





(III)

b) treating said alcohol with bromine, iodine, iodine monochloride, an N-fluoro bis sulfonamide or a compound of formula (XIII)

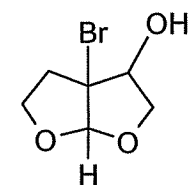


(XIII)

wherein:

R<sup>10</sup> is chlorine, bromine, or iodine; and

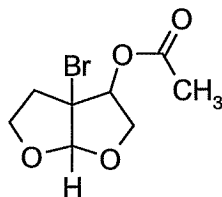
R<sup>11</sup> and R<sup>12</sup> are independently selected from C<sub>1-6</sub>alkyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-14</sub>aryl, and C<sub>6-14</sub>aryl-C<sub>1-6</sub>alkyl, or R<sup>11</sup> and R<sup>12</sup> together with the atoms to which they are attached form a 5-8 5-membered ring; and to form a compound of formula XIV;



(XIV)

~~e) optionally resolving to yield a compound of formula (XIX).~~

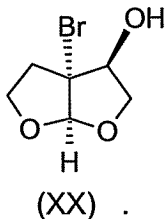
c) treating a compound of formula (XIV) with an acylating agent to form a compound of formula (XVI); and



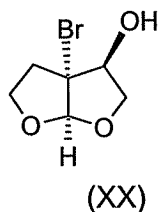
(XVI)

d) resolving a compound of formula (XVI) to form a compound of formula (XIX).

14. (originally presented) A compound of formula (XX)

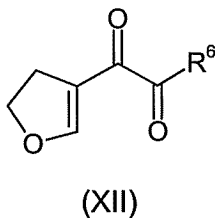


15. (originally presented) A process for the preparation of a compound of formula (XX)



comprising:

a) treating a compound of formula (XII)



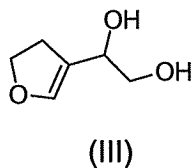
wherein:

$R^6$  is halogen,  $-OR^7$ , or  $-NR^8R^9$ ;

$R^7$  is hydrogen,  $C_{1-6}$ alkyl,  $C_{3-8}$ cycloalkyl,  $C_{6-14}$ aryl, or  $C_{6-14}$ aryl $C_{1-6}$ alkyl; and

$R^8$  and  $R^9$  are independently selected from hydrogen,  $C_{1-6}$ alkyl,  $C_{3-8}$ cycloalkyl,  $C_{6-14}$ aryl, and  $C_{6-14}$ aryl $C_{1-6}$ alkyl;

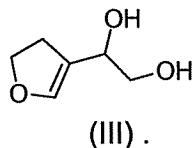
with a reducing agent to form an alcohol of formula (III)



b) treating said alcohol with N-bromosuccinimide to form a compound of formula (XX); and

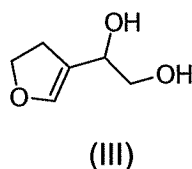
c) optionally resolving to yield diastereoisomers of compounds of formula (XX).

16. (originally presented) A compound of formula (III)

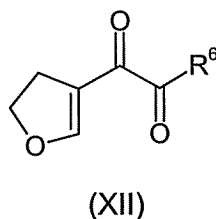


17. (cancelled)

18. (originally presented) A process for the preparation of compound (III)



comprising treating a compound of formula (XII)



wherein  $R^6$  is halogen,  $-OR^7$ , or  $-NR^8R^9$ ; where  $R^7$  is hydrogen,  $C_{1-6}$ alkyl,  $C_{3-8}$ cycloalkyl,  $C_{6-14}$ aryl, or  $C_{6-14}arylC_{1-6}alkyl$ ; and  $R^8$  and  $R^9$  are independently selected from hydrogen,  $C_{1-6}$ alkyl,  $C_{3-8}$ cycloalkyl,  $C_{6-14}$ aryl, and  $C_{6-14}arylC_{1-6}alkyl$ ; with a reducing agent.

19. (originally presented) A process according to claim 18 wherein the reducing agent is selected from the group consisting of di-*i*sobutylaluminium hydride (DIBAL), sodium borohydride, and lithium aluminum hydride.

20. (cancelled)

21. (cancelled)

22. (previously presented) A process for the preparation of compounds of formula I according to claim 3 wherein the first reducing agent is selected from the group consisting of di-*isobutyl*aluminium hydride (DIBAL), sodium borohydride, and lithium aluminum hydride, wherein  $R^6$  in the compound of formula (XII) is  $-OR^7$  where  $R^7$  is  $C_{1-6}$ alkyl, wherein the compound of formula (XIII) is N-bromosuccinimide, and the second reducing agent is palladium on carbon in combination with hydrogen.

23. (previously presented) A process for the preparation of compounds of formula V according to claim 6 wherein the first reducing agent is selected from the group consisting of di-*isobutyl*aluminium hydride (DIBAL), sodium borohydride, and lithium aluminum hydride, wherein  $R^6$  in the compound of formula (XII) is  $-OR^7$  where  $R^7$  is  $C_{1-6}$ alkyl, wherein the compound of formula (XIII) is N-bromosuccinimide, and the second reducing agent is palladium on carbon in combination with hydrogen.

24. (cancelled)

25. (cancelled)

26. (cancelled)

27. (cancelled)

28. (cancelled).

29. (cancelled)